REMARKS/ARGUMENTS

Claims 1, 4-14 and 17-30 are pending in the present application. In the Office Action mailed November 5, 2004, the Examiner rejected claims 1, 4-14 and 17-30 under 35 U.S.C. §102(e).

In the above amendments, new claims 31-33 have been added to recite that "the system calls are continuously monitored by splicing in a function that determines if an error occurred before the system call is actually placed." Support for this amendment may be found in Applicants' specification on page 12, lines 13-17.

Reconsideration is respectfully requested in view of the above amendments to the claims and the following remarks.

I. Rejection of Independent Claims 1, 14, and 23 Under 35 U.S.C. § 102(e)

The Examiner rejected independent claims 1, 14, and 23 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,40,317 to Snow (hereinafter "Snow"). This rejection is respectfully traversed.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131 (Aug. 2001) (*quoting Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Id.* (*quoting Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). In addition, "the reference must be enabling and describe the applicant's claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention." *In re Paulsen*, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

Applicants respectfully submit that Snow does not disclose all of the elements in claims 1, 14, and 23. For example, independent claims 1, 14, and 23 include the elements of "continuously monitoring system calls made by an application" and "detecting a failure in a system call made by the application." The present application explains these elements as follows:

> The healing program 102 includes a process monitoring component (PMC) 112 that monitors the application 104 for failures in system calls, e.g., in calling a routing, in creating a process, in loading a library, in accessing a shortcut, or in making other similar calls pointing to a specific memory location. Failures in these system calls indicate that the application 104 is no longer properly installed....
> [T]he healing program 102 begins running when the user terminal 106 boots up and continues running in the background as necessary to detect errors. The PMC 112... monitors 206 the application 104 for errors while the application 104 is running. The PMC 112 monitors the application 104 for errors by monitoring system calls made by the application 104....

Application, p. 5, lines 4-11; p. 12, lines 7-13. Snow, however, does not disclose either of these two elements.

Snow teaches a novel computer architecture which separates each application—*i.e.*, program—into "encapsulated working definitions" and a "runtime representation." Col. 5, lines 36-47. Snow defines the "working definitions" as a collection of unalterable constraints and definitions that set the "defining characteristics for the application." Col. 6, lines 53-54; Col. 9, lines 36-43. Such working definitions define "what an application is, what it requires, and what was done to give it what it needs, within a given computer system." Col. 6, lines 60-65. The "runtime representation" must satisfy these unalterable working definitions and is essentially the way in which the way that the application looks and performs during use. Col. 7, lines 31-39. Implementing a runtime representation as part of the particular application allows the application to be executed "within traditional execution environments, as defined by Windows, Unix, OS/2, and other operating system platforms. Col. 5, lines 40-47. As explained by Snow, it is absolutely "critical and necessary" that the working definitions be separated from the runtime representation. Col. 5, lines 40-42; Figure 5.

Snow's novel computer architecture allows the system to include a damage detection and repair facility ("DDRF") that will monitor the runtime representation of each application to determine if the application has been damaged or improperly changed. *See* Figures 6-7; Col. 9, lines 28-46. More particularly, Snow's system is designed such that the DDRF "monitors the computer system" by examining the runtime representation of each application to "determine[]

[if] changes have been made to files, settings or encapsulated applications." Col. 9, lines 65-67. If the DDRF finds changes, these changes are then "compare[d] against the constraints as defined by the set of working definitions in the computer system" to determine "whether the changes create[] any conflict" with the working definitions. Col. 10, lines 10-13; Figure 7. The existence of such "conflicts" is the way that the system detects whether the application has been damaged. The system then fixes these conflicts by "repairing the damaged file, installing a missing driver, or adjusting an environmental variable" such that there is no longer a conflict between the runtime representation and the pre-established working definitions. Col. 1, lines 61-64; Col. 10, lines 17-19.

Thus, to the extent that Snow teaches a system that monitors/detects damaged computer applications, Snow accomplishes this monitoring via a different method and in a manner that is different from that which is required by the present claims. As described above, Snow's monitoring involves comparing the runtime representation of the application to the working definitions. Snow does not teach that the monitoring includes an examination of the *system calls*, or that such monitoring of system calls occurs *continuously*. In fact, Applicants can find no teaching or disclosure in Snow that relates to system calls at all, let alone the required specific teaching about how/when such monitoring of system calls is occurring. Accordingly, Snow does not teach the claim element of "continuously monitoring" system calls as found in the present claims.

Applicants also submit that there is also no teaching or disclosure in Snow of a system that "detect[s] a failure in a system call." Snow determines failures in applications by comparing whether there is a conflict between the application's working definitions and runtime representation. Such comparisons of the working definitions/runtime representation is not equivalent to detecting a failure in a system call, nor does it even relate to system calls at all. Accordingly, Snow's system fails to teach anything related to detecting a failure in a system call made by the application.

Therefore, because Snow does not teach the elements found in claims 1, 14, and 23 of "continuously monitoring system calls made by an application" and "detecting a failure in a system call made by the application," this reference cannot and does not anticipate these claims under 35 U.S.C. §102(e). Withdrawal of this rejection is respectfully requested.

II. Rejection of Dependent Claims 4-13, 17-22, and 24-30 Under 35 U.S.C. § 102(e)

The Examiner also rejected dependent claims 4-13, 17-22, and 24-30 under 35 U.S.C. §102(e) as being anticipated by Snow. It is well settled that if an independent claim is allowable over the cited references, then any claims that depend from that allowable independent claim are likewise patentable. *See e.g., Hartness Int'l Inc. v. Simplimatic Eng'g Co.*, 2 USPQ2d 1826, 1831 (Fed. Cir. 1987) (holding that dependent claim 3 is patentable "*a fortiori*" simply because it depends from patentable claim 1). Here, dependent claims 4-13, 17-22, and 24-30 all depend from independent claims 1, 14, or 23, which are (as outlined above) clearly patentable over Snow. Accordingly, these dependent claims are likewise patentable over Snow and Applicants respectfully request that these rejections be withdrawn.

There are, however, some additional elements in the dependent claims that further operate to distinguish these claims from Snow. For example, dependent claim 7 includes an additional element that the "user of the device can determine the repair mechanism" that will be used to repair the damaged application. Dependent claim 8 recites an additional element that the "user of the device can initiate the repair mechanism." Contrary to the assertions in the Office Action, these claim elements are not disclosed by Snow Col. 1, lines 28-31/Col. 2, lines 44-50. Rather, these cited portions of Snow read as follows:

> The present invention relates generally to the field of computer software and, more particularly, to methods of detecting and repairing damaged files and settings within a data processing system....
>
> Therefore, there is a need for a method, system, and apparatus that automatically detects damaged files and applications and restore them to their proper condition.
>
> SUMMARY OF THE INVENTION
>
> The present application provides a method, system, and apparatus for detecting and repairing damaged portions of a

> computer system. In a preferred embodiment of the present invention....

Snow, Col. 1, lines 28-31 or Col. 2, lines 44-50. Thus it is clear that there cited portions of Snow do not even *mention* a user, let alone provide the specific disclosure regarding how a user can determine or initiate the repair mechanism. Accordingly, such disclosure does not provide the specific teaching necessary to anticipate the claim elements found in dependent claims 7 and 8. Withdrawal of these rejections is respectfully requested.

Finally, with respect to newly added claims 31-33, these claims recite the additional claim element that "the system calls are continuously monitored by splicing in a function that determines if an error occurred before the system call is actually placed." As noted above, Applicants submit that there is no teaching in Snow regarding continuously monitoring the application's system calls, let alone the specific teaching of monitoring a system call by splicing in a function in the manner outlined by claims 31-33. Accordingly, these claims are clearly patentable over Snow and should immediately be allowed.

III. Conclusion

Applicants respectfully assert that claims 1, 4-14 and 17-30 under , 31-33 are patentably distinct from the cited references, and request that a timely Notice of Allowance be issued in this case. If there are any remaining issues preventing allowance of the pending claims that may be clarified by telephone, the Examiner is requested to call the undersigned.

Respectfully submitted,

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